

The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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Ex parte FERDINAND GROGL and ALFRED MEHL

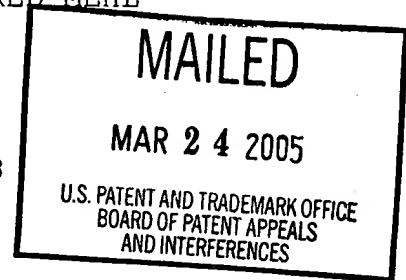
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Appeal No. 2004-1879  
Application No. 09/915,528

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HEARD: MARCH 8, 2005

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Before JERRY SMITH, BLANKENSHIP, and NAPPI, Administrative Patent Judges.

JERRY SMITH, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on the appeal under 35 U.S.C. § 134 from the examiner's rejection of claims 1-9, which constitute all the claims in the application.

The disclosed invention pertains to a cable with at least one transmission element, which is surrounded by a sheath of

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insulation material. The sheath consists of only an inner layer and an outer layer. A particular feature of the invention is that the values for tensile strength and elongation at break of the inner layer are significantly lower than those of the outer layer.

Representative claim 1 is reproduced as follows:

1. A cable with at least one transmission element, which is surrounded by a sheath of insulation material, wherein the sheath (M) consists of only an inner layer (3) and an outer layer (4), which are made of materials being firmly bonded together when the outer layer (4) is extruded around the inner layer (3) and wherein the values for tensile strength and elongation at break of inner layer (3) are significantly lower than those of the outer layer (4).

The examiner relies on the following references:

|                                |           |                       |
|--------------------------------|-----------|-----------------------|
| Wargotz et al. (Wargotz)       | 3,852,518 | Dec. 03, 1974         |
| Livingston et al. (Livingston) | 5,426,264 | June 20, 1995         |
| McGregor et al. (McGregor)     | 6,403,890 | June 11, 2002         |
|                                |           | (filed July 18, 2000) |

Claims 1-9 stand rejected under 35 U.S.C. § 103(a). As evidence of obviousness the examiner offers Wargotz in view of McGregor with respect to claims 1-3, 8 and 9, and Livingston is added to this combination with respect to claims 4-7.

Rather than repeat the arguments of appellants or the examiner, we make reference to the briefs and the answer for the respective details thereof.

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OPINION

We have carefully considered the subject matter on appeal, the rejections advanced by the examiner and the evidence of obviousness relied upon by the examiner as support for the rejections. We have, likewise, reviewed and taken into consideration, in reaching our decision, the appellants' arguments set forth in the briefs along with the examiner's rationale in support of the rejections and arguments in rebuttal set forth in the examiner's answer.

It is our view, after consideration of the record before us, that the evidence relied upon and the level of skill in the particular art would not have suggested to one of ordinary skill in the art the obviousness of the invention as set forth in claims 1-9. Accordingly, we reverse.

In rejecting claims under 35 U.S.C. § 103, it is incumbent upon the examiner to establish a factual basis to support the legal conclusion of obviousness. See In re Fine, 837 F.2d 1071, 1073, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988). In so doing, the examiner is expected to make the factual determinations set forth in Graham v. John Deere Co., 383 U.S. 1, 17, 148 USPQ 459, 467 (1966), and to provide a reason why one

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having ordinary skill in the pertinent art would have been led to modify the prior art or to combine prior art references to arrive at the claimed invention. Such reason must stem from some teaching, suggestion or implication in the prior art as a whole or knowledge generally available to one having ordinary skill in the art. Uniroyal, Inc. v. Rudkin-Wiley Corp., 837 F.2d 1044, 1051, 5 USPQ2d 1434, 1438 (Fed. Cir.), cert. denied, 488 U.S. 825 (1988); Ashland Oil, Inc. v. Delta Resins & Refractories, Inc., 776 F.2d 281, 293, 227 USPQ 657, 664 (Fed. Cir. 1985), cert. denied, 475 U.S. 1017 (1986); ACS Hosp. Sys., Inc. v. Montefiore Hosp., 732 F.2d 1572, 1577, 221 USPQ 929, 933 (Fed. Cir. 1984). These showings by the examiner are an essential part of complying with the burden of presenting a prima facie case of obviousness. Note In re Oetiker, 977 F.2d 1443, 1445, 24 USPQ2d 1443, 1444 (Fed. Cir. 1992). If that burden is met, the burden then shifts to the applicant to overcome the prima facie case with argument and/or evidence. Obviousness is then determined on the basis of the evidence as a whole and the relative persuasiveness of the arguments. See Id.; In re Hedges, 783 F.2d 1038, 1039, 228 USPQ 685, 686 (Fed. Cir. 1986); In re Piasecki, 745 F.2d 1468, 1472, 223 USPQ 785, 788 (Fed. Cir. 1984); and In re Rinehart, 531 F.2d

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1048, 1052, 189 USPQ 143, 147 (CCPA 1976). Only those arguments actually made by appellants have been considered in this decision. Arguments which appellants could have made but chose not to make in the brief have not been considered and are deemed to be waived [see 37 CFR § 41.37(c)(1)(vii)(2004)].

We consider first the rejection of claims 1-3, 8 and 9 based on Wargotz and McGregor. These claims stand or fall together as a single group [brief, page 4], and we will consider independent claim 1 as the representative claim for this group. With respect to representative claim 1, the examiner essentially finds that Wargots teaches the claimed invention except for the values for tensile strength and elongation at break of the inner layer being significantly lower than those for the outer layer. The examiner cites McGregor as teaching a cable where additives are mixed into the inner layer. The examiner finds that it would have been obvious to the artisan to mix additives as taught by McGregor into the inner layer of the Wargotz cable. The examiner asserts that since the inner layer of Wargotz would then include additives, the values for tensile strength and elongation at break of the inner layer would be significantly lower than those for the outer layer [answer, pages 4-5].

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Appellants argue that Wargotz and McGregor only show cables with a two layer sheath of insulation material. Appellants assert that these references are completely silent on the relative tensile strength and elongation at break of the inner and outer layers. Appellants also argue that the examiner's assertion that since the inner layer includes additives, the values for tensile strength and elongation at break of the inner layer are significantly lower than those of the outer layer is mere supposition, has no technical basis, and is not true. Finally, appellants argue that there is no motivation to combine Wargotz with McGregor in the manner proposed by the examiner because the additives taught by McGregor are particular to the application for the cable in McGregor and would have no utility in the application of the Wargotz cable [brief, pages 4-11].

The examiner responds that McGregor teaches the advantages of modifying the cable in Wargotz and that appellants have simply found a new advantage for this combination. The examiner asserts that the references can be combined because they both relate to the field of power cables [answer, pages 6-9].

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Appellants respond that McGregor and Wargotz are completely silent about the values of tensile strength and elongation at break of the different layers of the cable sheath. Appellants also respond that McGregor and Wargotz are silent about any influence of additives to insulating materials in the direction of tensile strength and elongation at break. Finally, appellants respond that the fact that both references relate to power cables is insufficient to support their combination because they relate to entirely different types of cables for entirely different applications [reply brief, pages 1-3].

We will not sustain the examiner's rejection of claims 1-3, 8 and 9 for essentially the reasons argued by appellants in the briefs. Specifically, there is no support for the examiner's position that the additives in McGregor would have any substantial effect on the tensile strength or break at elongation of the insulation layer. Any assertion that the additives would necessarily significantly lower the tensile strength and elongation at break of the modified layer is nothing more than unsupported speculation. We also agree with appellants that there is no motivation to combine the teachings of Wargots with the teachings of McGregor. The additives described in McGregor

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are used to solve a very specific problem associated with cables used in magnetic motors. The cables of Wargotz, however, are disclosed as being used as underground power cables. There is no indication that the power cables of Wargotz have any application associated with magnetic motors. Therefore, there is no basis for the artisan to modify the cable of Wargotz with the additives of McGregor because the problem described in McGregor is not present in the Wargotz application. The examiner's proposed combination can only logically be based on an attempt to reconstruct the claimed invention in hindsight.

We now consider the rejection of claims 4-7 based on Wargotz, McGregor and Livingston. These claims stand or fall together as a single group [brief, page 4]. The examiner has indicated how he finds the invention of these claims to be unpatentable over the applied prior art [answer, pages 5-6]. In addition to the arguments considered above, appellants argue that Livingston does not teach the selection of materials based on tensile strength. Appellants argue that there is no motivation to combine the teachings in the manner proposed by the examiner [brief, pages 12-14]. The examiner responds that the materials taught by Livingston have different tensile strengths as claimed [answer, pages 9-10].



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We will not sustain the examiner's rejection of claims 4-7 for essentially the reasons argued by appellants. We incorporate our discussion above with respect to the combination of Wargotz and McGregor. Livingston does not overcome the deficiencies of the basic combination discussed above. Although it may be possible to select materials taught by Livingston that would have the tensile properties and break at elongation in the manner claimed, there is no suggestion in Livingston to apply these teachings to the cable of Wargotz. Livingston also teaches that an adhesive would need to be used between the two layers of insulation while claim 4, which depends from claim 1, recites that the two layers of insulation are firmly bonded together when they are extruded together. Thus, it appears that the applied prior art would teach the use of an adhesive which is not permitted in the claimed invention. Therefore, the claimed invention is not taught by the applied references.

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In summary, we have not sustained either of the examiner's rejections of the claims on appeal. Therefore, the decision of the examiner rejecting claims 1-9 is reversed.

REVERSED

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JERRY SMITH

JERRY SMITH  
Administrative Patent Judge

Howard B. Blankenship

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